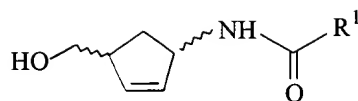


in which R¹ denotes C₁-C₄ -alkyl, - C₁-C₄ alkoxy, aryl or aryloxy, as sole nitrogen source, as sole carbon source, as sole carbon source or as sole carbon and nitrogen source, and enzyme extracts therefrom.

17. (New) The microorganism and extract according to Claim 1, in which the microorganism is selected from the genera *Rhodococcus*, *Gordona*, *Arthrobacter*, *Alcaligenes*, (*Agrobacterium/Rhizobium*), *Bacillus*, *Pseudomonas* or *Alcaligenes/ Bordetella*.

18. (New) The microorganism and extract according to Claim 16 or 17, in which the microorganisms are selected from the species *Alcaligenes/Bordetella* FB 188 (DSM 11172), *Rhodococcus erythropolis* CB 101 (DSM 10686), *Arthrobacter* sp. HSZ 5 (DSM 10328), *Rhodococcus* sp. FB 387 (DSM 14291), *Alcaligenes xylosoxydans* ssp. *denitrificans* HSZ 17 (DSM 10329), *Agrobacterium/Rhizobium* HSZ 30, *Bacillus simplex* K2, *Pseudomonas putida* K32 or *Gordona* sp. CB 100 (DSM 10687), and functionally equivalent variants and mutants thereof.

19. (New) An enzyme having N-acetylamino-alcohol hydrolase activity, obtainable from the microorganism of Claims 16 or 17 wherein said microorganism is able to hydrolyse cyclopentene derivatives selected from compounds of the general formula



in which R¹ denotes C₁-C₄ -alkyl, - C₁-C₄ alkoxy, aryl or aryloxy, and functionally equivalent variants and mutants thereof.

20. (New) The enzyme according to Claim 19, having

- (a) a pH optimum of pH 7.0 ± 1.0;
- (b) a temperature optimum between 25°C and 30°C at a pH of 7.0; and
- (c) a K_M for the substrate 1-acetylamino-4-hydroxy-methyl-2-cyclopentene of 22.5 mM ± 7.5 mM (30°C 100 mM phosphate buffer),
(and functionally equivalent variants and mutants thereof.)

21. (New) The enzyme according to Claim 19 or 20, further characterized by

- (a) an N-terminal amino acid sequence of Thr-Glu-Gln-Asn-Leu-His-Trp-Leu-Ser-Ala-Thr-Glu-Met-Ala-Ala-Ser-Val-Ala-Ser-Asn; and
- (b) a molecular weight, determined by SDS-PAGE, of 50 kD,
and functionally equivalent variants and mutants thereof.--